

Claims

1. A plated resin molded article that has a metal plating layer on the surface of a thermoplastic resin molded article, comprising a composition that comprises:

(A) 10 to 90 mass% of a matrix resin that has a water absorption after 24 hours in 23°C water (ISO62) of at least 0.6% and

(B) 90 to 10 mass% of a non-styrenic resin that has a water absorption after 24 hours in 23°C water (ISO62) of less than 0.6%, wherein the thermoplastic resin molded article is not subjected to etching with a heavy metal-containing acid.

2. The plated resin molded article according to claim 1, wherein (A) matrix resin that has a saturated water absorption of at least 0.6% is selected from polyamide-type resins, acrylate salt-type resins, cellulosic resins, polyvinyl alcohol-type resins and polyether-type resins; and (B) non-styrene-type resin that has a saturated water absorption of less than 0.6% is selected from polyolefin-type resins, polyphenylene ether-type resins and polyester-type resins.

3. The plated resin molded article according to claim 1 or 2, wherein the thermoplastic resin molded article further comprises (C) a water-soluble substance having a solubility (25°C) of not more than 300 g in 100 g water.

4. The plated resin molded article according to any of claims 1 to 3, wherein the thermoplastic resin molded article further comprises (D) a surfactant and/or a coagulant.

5. The plated resin molded article according to claim 4, wherein the surfactant comprises an emulsifying agent that is used in emulsion polymerization.

6. The plated resin molded article according to any of claims 1 to 5, wherein the thermoplastic resin molded article further comprises (E) a phosphorus compound.

7. The plated resin molded article according to any of claims 1 to 6, wherein the maximum value of the adhesive strength (JIS H8630) between the thermoplastic resin molded article and the metal plating layer is at least 10 kPa.

8. The plated resin molded article according to any of claims 1 to 7, applied as an automotive component.

9. A method of producing a plated resin molded article according to any of claims 1 to 8, wherein the plated resin molded article is produced by plating metal on the surface of the thermoplastic resin molded article, the method comprising the step of contact-treatment of the thermoplastic resin molded article with an acid or base that does not contain heavy metal, as a treatment preceding a metal plating step, and wherein a step of etching with a heavy metal-containing acid is not included.

10. The method of producing a plated resin molded article according to claim 9, comprising the steps of: the removal of fat of the thermoplastic resin molded article; contact-treatment of the thermoplastic resin molded article with an acid or base that does not contain heavy metal; and plating step, and the method not including a step of etching with a heavy metal-containing acid.

11. The method of producing a plated resin molded article according to claim 9, comprising the steps of: the removal of fat of the plastic resin molded article; contact-treatment of the thermoplastic resin molded article with an acid or base that does not contain heavy metal; treatment of the thermoplastic resin molded article with a catalyst imparting liquid; and plating step, and the method not including a step of etching with a heavy metal-containing acid.

12. The method of producing a plated resin molded article according to any of claims 9 to 11, wherein the concentration of the acid or base used in the step of the contact-treatment with an acid or base that does not contain heavy metal is less than 4 normal.

13. The method of producing a plated resin molded article according to any of claims 9 to 12, wherein the step of the contact-treatment with an acid or base that does not contain heavy metal is a step of immersing the

thermoplastic resin molded article in acid or base that does not contain heavy metal.

14. The method of producing a plated resin molded article according to any of claims 9 to 13, wherein the step of the contact treatment with an acid or base that does not contain heavy metal is a step of immersing the thermoplastic resin molded article for 20 to 0.5 minutes at a liquid temperature of 10 to 80°C in acid or base that does not contain heavy metal.

15. The method of producing a plated resin molded article according to any of claims 9 to 14, wherein the acid that does not contain heavy metal is selected from hydrochloric acid, phosphoric acid, sulfuric acid and organic acids.

16. The method of producing a plated resin molded article according to any of claims 9 to 15, wherein the base that does not contain heavy metal is selected from hydroxides of an alkali metal or alkali earth metal.